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**METHOD FOR DETECTING AND TREATING TUMORS USING
LOCALIZED IMPEDANCE MEASUREMENT**

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5 **Cross-Related Applications**

10 *ps 2/21/08* This application claims the benefit of priority to US Provisional
09/916,214 Application Serial No. 60/220,639 filed July 25, 2000, entitled "Tissue,
Monitoring and Characterization Apparatus and Method", which is fully
incorporated by reference herein. This application is also related to co-pending
application attorney docket number ~~13724-849~~ which is also fully incorporated
by reference herein.

Field of the Invention

15 This invention relates generally to a method for performing tissue
characterization using minimally invasive methods. More particularly, the
invention relates to a method and apparatus for performing an in vivo tissue
characterization to identify and discriminate between diseased and healthy tissue
using localized measurement of tissue impedance. Still more particularly, the
20 invention to relates to method and apparatus for performing tissue
characterization before, during or after ablative therapy using localized complex
impedance measurement to monitor and titrate the delivery of ablative therapy to
improve clinical outcomes.

25 **BACKGROUND OF THE INVENTION**

Various ablative therapies such as radio-frequency, microwave and laser
ablation can be used to treat benign and cancerous tumors. In theory, such
methods are intended to produce physiological and structural changes to cause
cell necrosis or destruction of the selected target tissue. However in practice,
30 there are numerous difficulties in the use of ablative procedures to treat

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